00604576 S

CORRES CONTROL OUTGOING LTR NO

93-RF 3814

EG&G ROCKY FLATS

EG&G ROCKY FLATS, INC
ROCKY FLATS PLANT P O BOX 464, GOLDEN, COLORADO 80402-0464 • (303) 966 7000

DIST		
BENEDETTI R L		
BENJAMIN, A		
BERMAN, H S		
BRANCH D B		
CARNIVAL G J		
DAVIS J G		
FERRERA D W		
HANNI B J		
HARMAN, L K		
HEALY, T J		
HEDAHL, T	X	
HILBIG J G		
IDEKER E H		
KIRBY W A		
KUESTER, A W		
LEE, E M		
MANN H P		
MARX G E		
McDONALD, M M		
McKENNA, F G		
MONTROSE J K		
MORGAN R V		
POTTER G L	X	
PIZZUTO, V M		
RILEY J H		
SANDLIN, N B		
SHEPLER R L		
STEWART D L		
SULLIVAN M T		
SWANSON E R		
WILKINSON, R B		
WILLIAMS S (ORC)		
WI J M		
ZA O		
Setlock G H	X	
Motyl K N	X	
Eswdridge T	X	
Stevens R T	X	
Murray D S	X	
Mende E W	X	
P H S A	X	
Neeta, S	X	
CORRES CONTROL	X	X
TRAFFIC		

March 26,1993

93-RF-3814

James K Hartman
Transition and Environmental Restoration
DOE, RFO

Attn M Van Der Puy

INTERIM POND WATER MANAGEMENT PLAN - GHS-148-93

This letter transmits the revised draft Interim Pond Water Management Plan This document was prepared in response to a verbal request from your staff to develop a plan for management of Rocky Flats Plant pond waters during preparation of the Pond Water Management Interim Measures/Interim Remedial Action (IM/IRA) A copy of the draft plan was distributed to your staff on Wednesday, March 24, 1993

This draft plan reflects the anticipated pond activities prior to implementation of the Pond Water Management IM/IRA Included in the plan are management of spray evaporation and inter-pond transfers, as well as management of Terminal Pond waters

If you have any questions, please contact Steve Pettis at extension 8615

George H Setlock

George H Setlock, Director
Environmental Protection Management

WJB fm

Orig and 1 cc - J K Hartman

Enclosure
As Stated

CLASSIFICATION

UCNI	X	X
UNCLASSIFIED	X	X
CONFIDENTIAL		
SECRET		

AUTHORIZED CLASSIFIER SIGNATURE
George H Setlock
UNU

DATE 3/29/93

IN REPLY TO RFP CC NO

ACTION ITEM STATUS
☐ OPEN ☐ CLOSED
☐ PARTIAL

LTR APPROVALS
WJB / GHS

ORIG & TYPIST INITIALS
WJB JM

ADMIN RECORD

A-OU06-000286

INTERIM POND WATER MANAGEMENT PLAN

(Revised March 23, 1993); Rev 4 4/1/93 to Regulators

Landfill Pond

Maximum Elevation	5921 0 feet	7 52 Mgal	100%
Action Level	5920 0 feet	6 65 Mgal	88 4%
Normal Operational Range	5917 0 feet	4 51 Mgal	60%
	5912 5 feet	2 26 Mgal	30%

Normal Operations

Normal operation for the Landfill Pond is to spray evaporate the water over the pond The option exists to transfer the water to Ponds A-1 and A-2 for spray evaporation

Spray evaporation operations will be conducted during daylight hours and will not be conducted during inclement weather (humidity greater than 80% for prolonged periods, sustained wind speed in excess of 30 mph, and/or air temperatures less than 35° F)

Sampling

Prior to initiation of transfer or spray evaporation, the Landfill Pond will be sampled and analyzed for HSL metals, volatile organics, semi-volatile organics, gross alpha and gross beta, pH, and nitrates During extended periods of transfer or spray evaporation activities, water samples will be taken quarterly (approximately June and September)

Operational Guidance.

Operational decisions will be based on comparing the analytical data to Segment 5 stream standards

If the pond water meets Segment 5 stream standards for the parameters analyzed, the water may be spray evaporated or the water may be transferred to Ponds A-1 and A-2

If the pond water does not meet Segment 5 stream standards, treatment options will be identified and evaluated to reduce the contaminant concentrations prior to spray evaporation or transfer to Pond A-1 or A-2 The use of optional treatment technologies will be further evaluated in the IM/IRA It may not be possible to initiate treatment prior to implementation of the IM/IRA

Emergency Operations

Landfill Pond water may be transferred to Ponds A-1 and A-2 regardless of compliance with Segment 5 stream standards if, and only if each of the following conditions exist

(1) the water elevation is within one foot of spillway (Action Level), and

(2) further storms are predicted or other factors prohibit spray evaporation

Notification

Prior to routine transfers or spray evaporation operations, EG&G will submit a written request and obtain approval from DOE/RFO and DOE/RFO will notify CDH and/or EPA

Concurrent with actions taken to mitigate conditions outlined under the emergency operations of the landfill pond, EG&G will notify DOE/RFO and DOE/RFO will notify CDH and/or EPA

For 1993 Season.

EG&G anticipates one transfer of approximately 1 million gallons to Ponds A-1 and A-2 in the spring

EG&G will spray evaporate approximately 2 million gallons of water from April through October

Ponds A-1 and A-2

Pond A-1

Maximum Elevation	5829 1 feet	1 40 Mgal	100%
Action Level	5828 6 feet	1 24 Mgal	88 6%
Normal Operational Range	5827 3 feet	0 84 Mgal	60%
	5825 9 feet	0 42 Mgal	30%

Pond A-2

Maximum Elevation	5816 9 feet	6 03 Mgal	100%
Action Level	5815 9 feet	5 21 Mgal	86 4%
Normal Operational Range	5813 7 feet	3 62 Mgal	60%
	5810 4 feet	1 81 Mgal	30%

Normal Operations

Normal operation for Ponds A-1 and A-2 is to transfer Pond A-1 to Pond A-2 and spray evaporate Pond A-2

Spray evaporation operations will be conducted during daylight hours and will not be conducted during inclement weather (humidity greater than 80% for prolonged periods, sustained wind speed in excess of 30 mph, and/or air temperatures less than 35° F) or after containment of a spill in one of the ponds

Sampling

Prior to initiation of transfer or spray evaporation, the pond will be sampled and analyzed for HSL metals, volatile organics, semi-volatile organics, gross alpha and gross beta, pH, and nitrates During extended periods of transfer or spray evaporation activities, water samples will be taken quarterly (approximately June and September)

Operational Guidance

Operational decisions will be based on comparing the analytical data to Segment 5 stream standards

If the pond water meets Segment 5 stream standards for the parameters analyzed, the water may be spray evaporated or the water may be transferred between Ponds A-1 and A-2

If the pond water does not meet Segment 5 stream standards, treatment options will be identified and evaluated to reduce the contaminant concentrations prior to spray

evaporation or transfer between Ponds A-1 or A-2 The use of optional treatment technologies will be further evaluated in the IM/IRA It may not be possible to initiate treatment prior to implementation of the IM/IRA

Emergency Operations

Pond A-1 may be transferred to Pond A-2 or Pond A-2 may be transferred to Pond A-1, regardless of compliance with Segment 5 stream standards, if each of the following conditions exist

(1) Pond A-1 water elevation is within 1/2 foot of the spillway and/or Pond A-2 water elevation is within one foot of the drop structure (Action Levels), and

(2) further storms are predicted or other factors prohibit spray evaporation

Notification.

Prior to routine transfers or spray evaporation operations, EG&G will submit a written request and obtain approval from DOE/RFO and DOE/RFO will notify CDH and/or EPA

Concurrent with actions taken to mitigate conditions outlined under the emergency operations of Pond A-1 and A-2, EG&G will notify DOE/RFO and DOE/RFO will notify CDH and/or EPA

Concurrent with actions taken to contain a potential spill routed to Pond A-1 or A-2, EG&G will notify DOE/RFO and DOE/RFO will notify CDH and/or EPA

For 1993 Season

EG&G will spray evaporate approximately 2 million gallons of water from April through October

Ponds B-1 and B-2

Pond B-1

Maximum Elevation	5879 6 feet	0 53 Mgal	100%
Action Level	5879 1 feet	0 43 Mgal	81 1%
Normal Operational Range	5878 5 feet	0 33 Mgal	60%
	5877 5 feet	0 17 Mgal	30%

Pond B-2

Maximum Elevation	5868 9 feet	1 56 Mgal	100%
Action Level	5867 9 feet	1 25 Mgal	80 1%
Normal Operational Range	5866 8 feet	0 94 Mgal	60%
	5864 6 feet	0 47 Mgal	30%

Normal Operations.

Normal operation for Ponds B-1 and B-2 is to transfer Pond B-1 to Pond B-2 and then transfer Pond B-2 to Pond A-2 for spray evaporation

Spray evaporation operations will be conducted during daylight hours and will not be conducted during inclement weather (humidity greater than 80% for prolonged periods, sustained wind speed in excess of 30 mph, and/or air temperatures less than 35o F) or after containment of a spill in one of the ponds

Sampling

Prior to initiation of transfer or spray evaporation, the pond will be sampled and analyzed for HSL metals, volatile organics, semi-volatile organics, gross alpha and gross beta, pH, and nitrates During extended periods of transfer or spray evaporation activities, water samples will be taken quarterly (approximately June and September)

Operational Guidance

Operational decisions will be based on comparing the analytical data to Segment 5 stream standards

If the pond water meets Segment 5 stream standards for the parameters analyzed, the water may be spray evaporated at Pond B-2 or the water may be transferred to Pond A-2 and spray evaporated Spray evaporation capabilities do not currently exist at Pond B-2, but are being evaluated

If the pond water does not meet Segment 5 stream standards, treatment options will be identified and evaluated to reduce the contaminant concentrations prior to spray

evaporation or transfer to Pond A-2 The use of optional treatment technologies will be further evaluated in the IM/IRA It may not be possible to initiate treatment prior to implementation of the IM/IRA

Emergency Operations

Pond B-1 may be transferred to Pond B-2 and then Pond B-2 may be transferred to Pond A-2, regardless of compliance with Segment 5 stream standards, if each of the following conditions exist

(1) Pond B-1 water elevation is within 1/2 foot of the drop structure and/or Pond B-2 water elevation is within one foot of the drop structure (Action Levels), and

(2) further storms are predicted or other factors prohibit spray evaporation

Notification

Prior to routine transfers or spray evaporation operations, EG&G will submit written requests and obtain approval from DOE/RFO and DOE/RFO will notify CDH and/or EPA

Concurrent with actions taken to mitigate conditions as outlined under the emergency operations of Pond B-1 and B-2, EG&G will notify DOE/RFO and DOE/RFO will notify CDH and/or EPA

Concurrent with actions taken to contain a potential spill routed to Pond B-1 or B-2, EG&G will notify DOE/RFO and DOE/RFO will notify CDH and/or EPA

For 1993 Season

EG&G will conduct two transfers of approximately 0 3 million gallons to Pond A-2 (spring and fall) The water will be spray evaporated at Pond A-2 from April through October

Ponds A-3, B-5, and A-4

Pond A-3

Maximum Elevation	5793 0 feet	12 4 Mgal	100%
Normal Operational Range	5788 1 feet	6 2 Mgal	50%
	5781 5 feet	1 2 Mgal	10%

Pond B-5

Maximum Elevation	5803 9 feet	24 0 Mgal	100%
Normal Operational Range	5796 5 feet	12 0 Mgal	50%
	5785 8 feet	2 4 Mgal	10%

Pond A-4

Maximum Elevation	5757 9 feet	32 5 Mgal	100%
Normal Operational Range	5753 3 feet	21 1 Mgal	65%
	5741 0 feet	3 3 Mgal	10%

Normal Operations

Transfer of Pond B-5 and discharge of Pond A-3 to Pond A-4 are initiated when their volumes approach 50%

Pond A-4 will be maintained near 50% and will not exceed 65%

Transfer and discharge to Pond A-4 will be discontinued prior to a pre-discharge sampling event with CDH

If the transfer/discharge of water into Pond A-4 would cause its level to exceed 65%, Pond B-5 and/or Pond A-3 may be transferred to Pond A-4 during its discharge

After completion of a Pond A-4 discharge, the cycle will be re-initiated A discharge cycle requires approximately 6 weeks to complete

Sampling

Prior to discharge, a pre-discharge sampling event will be conducted with CDH The pond will be sampled to ensure compliance with the Segment 4 stream standards

Operational Guidance.

Pond A-4 water meeting Segment 4 stream standards will be discharged without treatment

Pond A-4 water not meeting Segment 4 stream standards may be treated using available GAC units, as appropriate, and recirculated to Pond A-4 until analysis indicates compliance with Segment 4 stream standards

Emergency Operations.

Emergency operations will be consistent with the RFP procedure, Water Detention Pond Dam Failure, 1-15200-EPIP-12 14

Notification.

After analytical results have been reviewed, EG&G will submit a written request and obtain approval to discharge Pond A-4 from DOE/RFO and DOE/RFO will receive concurrence from CDH and/or EPA

For the 1993 season.

EG&G will complete transfer/discharge cycles about every 6 weeks, with approximately 16 million gallons of water discharged offsite during each cycle

During high precipitation periods (spring runoff) Pond B-5 and/or Pond A-3 may have to be transferred to Pond A-4 while the Pond A-4 is being discharged

Pond C-2

Maximum Elevation	5765 3 feet	22 8 Mgal	100%
Normal Operational Range	5760 3 feet	11 4 Mgal	50%
	5753 5 feet	2 3 Mgal	10%

Normal Operations

Normally, discharge of Pond C-2 will be initiated when its volume approaches 50%

Pond C-2 is discharged via pipeline to the Broomfield Diversion Ditch

Sampling.

Prior to discharge, a pre-discharge sampling event will be conducted with CDH The pond will be sampled to ensure compliance with the Segment 4 stream standards

Operational Guidance.

Pond C-2 water meeting Segment 4 stream standards will be discharged without treatment

Pond C-2 water not meeting Segment 4 stream standards may be treated using available GAC units, as appropriate, and recirculated to Pond C-2 until analysis indicates compliance with Segment 4 stream standards

Emergency Operations

Emergency discharges will be consistent with the RFP procedure, Water Detention Pond Dam Failure, 1-15200-EPIP-12 14

Notification

After analytical results have been reviewed, EG&G will submit a written request and obtain approval to discharge Pond C-2 from DOE/RFO and DOE/RFO will receive concurrence from CDH and/or EPA

For the 1993 season

EG&G anticipates that only one discharge will be required after the spring runoff events The volume discharged offsite should be approximately 12 million gallons

Depending on the number and intensity of storm events in the spring, summer, and fall, additional discharge events may be required

JAN 1990 - NOV 1991 POND ANALYSIS

CHEMICAL CLASSIFICATION	POND A-1 ANALYTES DETECTED	POND A-2 ANALYTES DETECTED	POND B-1 ANALYTES DETECTED	POND B-2 ANALYTES DETECTED
VOLATILES	Acetone		Acetone	Acetone
			Methylene Chloride	1,2 Dichloroethene
				Methylene Chloride
				TCE
SEMI-VOLATILES		Bis (2-ethylhexyl) Phthalate		
METHOD 502 2	1,2,4 Trimethylbenzene	1,2,3 Trichlorobenzene	Chloroform	1,1,1 Trichloroethane
	Hexachlorobutadiene	1,2,4 Trichlorobenzene	Naphthalene	1,2,4 Trichlorobenzene
	Naphthalene	Dichlorodifluoromethane	PCE	Carbon Tetrachloride
	PCE	PCE	TCE	Chloroform
	n-Butylbenzene	TCE		PCE
		Cis-1,3 Dichloropropene		Toluene
				TCE
				Vinyl Cloride
				Cis-1,2 Dichloroethene
				Trans-1,2 Dichloroethene
TRIAZINES	Atrazine	Atrazine	Atrazine	
PAH METHOD 610			Fluorene	

SHADED AREA INDICATES THAT THE ANALYTE IS ABOVE SEGMENT 5 STREAM STANDARI

3/11/93 DRAFT

INTERIM POND WATER MANAGEMENT PLAN

Landfill Pond

Maximum Elevation	5921 0 feet	7 52 Mgal	100%
Action Level	5920 0 feet	6 65 Mgal	88 4%
Normal Operational Range	5917 0 feet	4 51 Mgal	60%
	5912 5 feet	2 26 Mgal	30%

Normal Operations.

Normal operation for the Landfill Pond is to spray evaporate the water over the pond The option exists to transfer the water to Ponds A-1 and A-2 for spray evaporation

Spray evaporation operations will be conducted during daylight hours and will not be conducted during inclement weather (humidity greater than 80% for prolonged periods, sustained wind speed in excess of 30 mph, and/or air temperatures less than 35° F)

Sampling

Prior to initiation of transfer or spray evaporation, the Landfill Pond will be sampled and analyzed for HSL metals, volatile organics, gross alpha and gross beta, pH, and nitrates During extended periods of transfer or spray evaporation activities, water samples will be taken quarterly (approximately June and September)

Operational Guidance.

Operational decisions will be based on comparing the analytical data to LDR F039 waste water standards and Segment 5 stream standards

If the pond water meets LDR standards for the parameters analyzed, the water may be spray evaporated

If the pond water meets Segment 5 stream standards for the parameters analyzed, the water may be transferred to Ponds A-1 and A-2

If the pond water does not meet LDR FO39 standards or Segment 5 Stream Standards, treatment options will be identified, evaluated and instituted to reduce contaminant concentrations prior to spray evaporation Treatment options may include aeration, granular activated carbon (GAC), or bio-remediation

Emergency Operations.

Landfill Pond water may be transferred to Ponds A-1 and A-2 regardless of compliance with LDR FO39 and Segment 5 Stream Standards if, and only if each of the following conditions exist

(1) the water elevation is within one foot of spillway (Action Level), and

(2) further storms are predicted or other factors prohibit spray evaporation,

Notification.

Prior to all transfers or spray evaporation operations, EG&G will submit a written request and obtain approval from DOE/RFO and DOE/RFO will notify CDH and/or EPA

For 1993 Season

EG&G anticipates one transfer of approximately 1 million gallons to Ponds A-1 and A-2 in the spring

EG&G will spray evaporate approximately 2 million gallons of water from April through October

Ponds A-1 and A-2

Pond A-1

Maximum Elevation	5829 1 feet	1 40 Mgal	100%
Action Level	5828 6 feet	1 24 Mgal	88 6%
Normal Operational Range	5827 3 feet	0 84 Mgal	60%
	5825 9 feet	0 42 Mgal	30%

Pond A-2

Maximum Elevation	5816 9 feet	6 03 Mgal	100%
Action Level	5815 9 feet	5 21 Mgal	86 4%
Normal Operational Range	5813 7 feet	3 62 Mgal	60%
	5810 4 feet	1 81 Mgal	30%

Normal Operations.

Normal operation for Ponds A-1 and A-2 is to transfer Pond A-1 to Pond A-2 and spray evaporate Pond A-2

Spray evaporation operations will be conducted during daylight hours and will not be conducted during inclement weather (humidity greater than 80% for prolonged periods, sustained wind speed in excess of 30 mph, and/or air temperatures less than 35° F) or after containment of a spill in one of the ponds

Sampling.

Prior to initiation of transfer or spray evaporation, the pond will be sampled and analyzed for HSL metals, volatile organics, gross alpha and gross beta, pH, and nitrates During extended periods of transfer or spray evaporation activities, water samples will be taken quarterly (approximately June and September)

Operational Guidance.

Operational decisions will be based on comparing the analytical data to LDR F039 waste water standards and Segment 5 stream standards

If the pond water meets LDR standards for the parameters analyzed, the water may be spray evaporated

If the pond water meets Segment 5 stream standards for the parameters analyzed, the water may be transferred to Ponds A-1 and A-2

If the pond water does not meet LDR FO39 standards or Segment 5 Stream Standards, treatment options will be identified, evaluated and instituted to reduce contaminant concentrations prior to spray evaporation Treatment options may include aeration, granular activated carbon (GAC), or bio-remediation

Emergency Operations.

Pond A-1 may be transferred to Pond A-2 or Pond A-2 may be transferred to Pond A-1, dependent on each of the ponds available capacity, if each of the following conditions exist

(1) Pond A-1 water elevation is within 1/2 foot of the spillway and/or Pond A-2 water elevation is within one foot of the drop structure (Action Levels), and

(2) further storms are predicted or other factors prohibit spray evaporation, and

Notification

Prior to all transfers or spray evaporation operations, EG&G will submit a written request and obtain approval from DOE/RFO and DOE/RFO will notify CDH and/or EPA

Concurrent with actions taken to contain a potential spill by routing flow to in Pond A-1 or A-2, EG&G will notify DOE/RFO and DOE/RFO will notify CDH and/or EPA

For 1993 Season.

EG&G will spray evaporate approximately 2 million gallons of water from April through October

Ponds B-1 and B-2

Pond B-1

Maximum Elevation	5879 6 feet	0 53 Mgal	100%
Action Level	5879 1 feet	0 43 Mgal	81 1%
Normal Operational Range	5878 5 feet	0 33 Mgal	60%
	5877 5 feet	0 17 Mgal	30%

Pond B-2

Maximum Elevation	5868 9 feet	1 56 Mgal	100%
Action Level	5867 9 feet	1 25 Mgal	80 1%
Normal Operational Range	5866 8 feet	0 94 Mgal	60%
	5864 6 feet	0 47 Mgal	30%

Normal Operations.

Normal operation for Ponds B-1 and B-2 is to transfer Pond B-1 to Pond B-2 and then transfer Pond B-2 to Pond A-2 for spray evaporation

Spray evaporation operations will be conducted during daylight hours and will not be conducted during inclement weather (humidity greater than 80% for prolonged periods, sustained wind speed in excess of 30 mph, and/or air temperatures less than 35° F) or after containment of a spill in one of the ponds

Sampling.

Prior to initiation of transfer or spray evaporation, the pond will be sampled and analyzed for HSL metals, volatile organics, gross alpha and gross beta, pH, and nitrates During extended periods of transfer or spray evaporation activities, water samples will be taken quarterly (approximately June and September)

Operational Guidance.

Operational decisions will be based on comparing the analytical data to LDR F039 waste water standards and Segment 5 stream standards

If the pond water meets LDR standards for the parameters analyzed, the water may be spray evaporated at Pond B-2 However, spray evaporation capabilities do not currently exist at Pond B-2, but are being evaluated

If the pond water meets Segment 5 stream standards for the parameters analyzed, the water may be transferred to Ponds A-2 and spray evaporated

If the pond water does not meet LDR FO39 standards or Segment 5 Stream Standards, treatment options will be identified, evaluated and instituted to reduce contaminant concentrations prior to spray evaporation Treatment options may include aeration, granular activated carbon (GAC), or bio-remediation

Emergency Operations.

Pond B-1 may be transferred to Pond B-2 and then Pond B-2 may be transferred to Pond A-2, if each of the following conditions exist

(1) Pond B-1 water elevation is within 1/2 foot of the drop structure and/or Pond B-2 water elevation is within one foot of the drop structure (Action Levels), and

(2) further storms are predicted or other factors prohibit spray evaporation

Notification
Prior to all transfers or spray evaporation operations, EG&G will Submit written requests and obtain approval from DOE/RFO and DOE/RFO will notify CDH and/or EPA

Concurrent with actions taken to contain a potential spill (by routing flows) in Pond B-1 or B-2, EG&G will notify DOE/RFO and DOE/RFO will notify CDH and/or EPA

For 1993 Season.

EG&G will conduct two transfers of approximately 0 3 million gallons to Pond A-2 (spring and fall) The water will be spray evaporated at Pond A-2 from April through October

Ponds A-3, B-5, and A-4

Pond A-3

Maximum Elevation	5793 0 feet	12 4 Mgal	100%
Normal Operational Range	5788 1 feet	6 2 Mgal	50%
	5781 5 feet	1 2 Mgal	10%

Pond B-5

Maximum Elevation	5803 9 feet	24 0 Mgal	100%
Normal Operational Range	5796 5 feet	12 0 Mgal	50%
	5785 8 feet	2 4 Mgal	10%
Piezometer Level Action Point	5781 5 feet		

Pond A-4

Maximum Elevation	5757 9 feet	32 5 Mgal	100%
Normal Operational Range	5753 3 feet	21 1 Mgal	65%
	5741 0 feet	3 3 Mgal	10%

Guidelines.

Transfer of Pond B-5 and discharge of Pond A-3 to Pond A-4 are initiated when their volumes approach 50%

Pond A-4 will be maintained near 50% and will not exceed 65%

If the transfer/discharge of water into Pond A-4 would cause the level to exceed 65%, Pond B-5 and/or Pond A-3 may be transferred to Pond A-4 during its discharge Additionally, Pond B-5 may be transferred to Pond A-4 if the piezometer level of WH-2 at Pond B-5 exceeds 5781 5 feet

Transfer and discharge to Pond A-4 will be discontinued prior to a pre-discharge sampling event with CDH

After analytical results have been reviewed, EG&G will submit a written request and obtain approval to discharge Pond A-4 from DOE/RFO and DOE/RFO will receive concurrence from CDH and/or EPA

Pond A-4 water meeting Segment 4 Stream Standards will be discharged without further treatment

Pond A-4 water not meeting Segment 4 Stream Standards will be treated using GAC and recirculated to Pond A-4 until sampling analysis indicates compliance with Segment 4 Stream Standards After analytical results have been reviewed, EG&G will submit a written request and obtain approval to discharge Pond A-4 from DOE/RFO and DOE/RFO will receive concurrence from CDH and/or EPA

After completion of the Pond A-4 discharge, the cycle will be re-initiated A discharge cycle requires approximately 6 weeks to complete

Emergency Operations.

Emergency discharges will be consistent with the Environmental Protection Implementation Plan (EPIP)

For the 1993 season.

EG&G will complete transfer/discharge cycles about every 6 weeks, with approximately 16 million gallons of water discharged offsite during each cycle

During high precipitation periods (spring runoff) Pond B-5 and/or Pond A-3 may have to be transferred to Pond A-4 while the Pond A-4 is being discharged

Pond C-2

Maximum Elevation	5765 3 feet	22 8 Mgal	100%
Normal Operational Range	5760 3 feet	11 4 Mgal	50%
	5753 5 feet	2 3 Mgal	10%

Guidelines.

Normally, discharge of Pond C-2 will be initiated when its volume approaches 50%

Prior to discharge, a pre-discharge sampling event with CDH will be initiated

After analytical results have been reviewed, EG&G will submit a written request and obtain approval to discharge Pond A-4 from DOE/RFO and DOE/RFO will receive concurrence from CDH and/or EPA

Pond A-4 water meeting Segment 4 Stream Standards will be discharged without further treatment

Pond C-2 water not meeting Segment 4 Stream Standards will be treated using GAC and recirculated to Pond C-2 until sampling analysis indicates compliance with Segment 4 Stream Standards After analytical results have been reviewed, EG&G will submit a written request and obtain approval to discharge Pond C-2 from DOE/RFO and DOE/RFO will receive concurrence from CDH and/or EPA

Pond C-2 is discharged via pipeline to the Broomfield Diversion Ditch

Emergency Operations.

Emergency discharges will be consistent with the Environmental Protection Implementation Plan (EPIP)

For the 1993 season.

EG&G anticipates that only one discharge will be required after the spring runoff events The volume discharged offsite should be approximately 12 million gallons Depending on the number and intensity of storm events in the spring, summer, and fall, additional discharge events may be required